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probably sufficient to distinguish the animal generically from *Amœba*, and in this view the animal may be named *Deinamœba mirabilis*.

On the Mode in which Amœba swallows its Food.—Prof. LEIDY remarked that he had supposed that *Amœba* swallows food by this becoming adherent to the body, and then enveloped much as insects become caught and involved in syrup or other viscid substances. He had repeatedly observed a large *Amœba*, which he supposes to be *A. princeps*, creep into the interstices of a mass of mud and appear on the other side without a particle adherent. On one occasion he had accidentally noticed an *Amœba*, with an active flagellate infusorium, a *Urocentrum*, included between two of its finger-like pseudopods. It so happened that the ends of these were in contact with a confervous filament, and the glasses above and below, between which the *Amœba* was examined, effectually prevented the *Urocentrum* from escaping. The condition of imprisonment of the latter was so peculiar that he was led to watch it. The ends of the two pseudopods of the *Amœba* gradually approached, came into contact, and then actually became fused, a thing which he had never before observed with the pseudopods of an *Amœba*. The *Urocentrum* continued to move actively back and forth, endeavoring to escape. At the next moment a delicate film of the ectosarc proceeded from the body of the *Amœba*, above and below, and gradually extended outwardly so as to convert the circle of the pseudopods into a complete sac, inclosing the *Urocentrum*. Another of these creatures was noticed within the *Amœba* which appeared to have been inclosed in the same manner.

This observation would make it appear that the food of the *Amœba* ordinarily does not simply adhere to the body, and then sink into its substance, but rather, after becoming adherent or covered by the pseudopods or body, is then inclosed by the active extension of a film of ectosarc around it.

The death of Dr. Jeffreys Wyman was announced.

SEPTEMBER 15.

The President, Dr. RUSCHENBERGER, in the chair.

Twenty-three members present.

On the Motive Power of Diatomes.—Prof. LEIDY made some remarks on the moving power of diatomes, desmids, and other algae. While the cause of motion remains unknown, some of the uses are obvious. The power is considerable, and enables these minute organisms when mingled with mud readily to extricate themselves

and rise to the surface, where they may receive the influence of light and air. In examining the surface-mud of a shallow rain-water pool, in a recent excavation in brick clay, he found little else but an abundance of minute diatoms. He was not sufficiently familiar with the diatoms to name the species, but it resembled *Navicula radiosa*. The little diatoms were very active, gliding hither and thither, and knocking the quartz sand grains about. Noticing the latter, he made some comparative measurements, and found that the *Naviculæ* would move grains of sand as much as twenty-five times their own superficial area, and probably fifty times their own bulk and weight, or perhaps more.

Dr. J. GIBBONS HUNT made the following remarks:—

While examining, this summer, into the structure of some of the so-called insectivorous plants, but more especially into the anatomy of the genus *Nepenthes*, I observed a part which I have not seen expressed before, and of sufficient interest, perhaps, to go upon record.

In the vegetable kingdom it is exceedingly rare to meet with glands which have distinct *excretory* ducts. Some authors deny their existence entirely; but in *Nepenthes rafflesiana*, *N. distillatoria*, and *N. phyllamphora*, and probably in all the species, are large cylindrical glands which pour out their secretion through *distinct excretory ducts*. In *N. distillatoria* these glands are, on an average, about the one-thirty-fifth of an inch long, and the one-twentieth of an inch wide, while the ducts measure about the one-thirtieth of an inch in length. In the *Rafflesiana* the glands and ducts are much larger. A dense tissue of cells surrounds and thoroughly imbeds these glands in *Nepenthes*, and this peculiarity of position renders excretory ducts necessary for the secretion to find its way into the pitchers.

In the vegetable kingdom it is the rule for glands to be located *on* surfaces, but in *Nepenthes* where one system of glands is *imbedded* the duct becomes necessary, and so far as I know is the only instance of such ducts among plants.

SEPTEMBER 22.

The President, Dr. RUSCHENBERGER, in the chair.

Thirty-five members present.

Remarks on Sponges—Prof. LEIDY remarked that the animal nature and structure of the sponges were first clearly made known by Mr. H. J. Carter, of England, and Prof. H. James Clark, of this country. The sponges are compound, flagellate infusoria. The sponge infusorium had been appropriately named by Mr. Carter the spongozoon, the exact characters of which were first